(Amended) A compound of formula (I)

its derivatives, its analogs, its tautomeric forms, its stereoisomers, its polymorphs, its pharmaceutically acceptable salts, and its pharmaceutically acceptable solvates, wherein X represents O or S; [the groups R¹, R² and group] R³ when present on carbon atom, [may be same or different and represent] represents hydrogen, halogen, hydroxy, nitro, cyano, formyl or unsubstituted or substituted groups selected from alkyl, cyclo-alkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; [or] R¹[,] and R² along with the adjacent atoms to which they are attached [may also] form a [5-6 membered substituted or unsubstituted cyclic structure containing carbon atoms with one or more double bonds, which may optionally contain one or more heteroatoms selected from oxygen, nitrogen and sulfur phenyl group; R³ when attached to nitrogen atom represents hydrogen, hydroxy, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; the linking group represented by -(CH₂)_n-O- may be attached either through nitrogen atom or through carbon atom where n is an integer ranging from 1 -4; Ar/represents an unsubstituted or substituted divalent [single or fused aromatic or heterocyclic]phenylene group; R4 represents hydrogen atom, hydroxy, alkoxy,

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halogen, lower alkyl, unsubstituted or substituted aralkyl group or forms a bond together with the adjacent group R⁵; R⁵ represents hydrogen, hydroxy, alkoxy, halogen, lower alkyl group, acyl, unsubstituted or substituted aralkyl or R⁵ forms a bond together with R⁴; R⁶ represents hydrogen, an unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylamino-carbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups, with a provision that R⁶ does not represent hydrogen when R⁷ represents hydrogen or lower alkyl group; R⁷ represents hydrogen or unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups and Y represents oxygen or NR⁸, where R⁸ represents hydrogen, alkyl, aryl, hydroxyalkyl, aralkyl, heterocyclyl, heteroaralkyl groups; or R⁷ and R⁸ together may form a 5 or 6 membered cyclic structure containing carbon atoms, which may optionally contain one or more heteroatoms selected from oxygen, sulfur or nitrogen.

(2)

6. (Amended) A process for the preparation of compound of formula (I)

where X represents O or S; [the groups R¹, R² and group] R³ when present on carbon atom, [may be same or different and represent] represents hydrogen, halogen, hydroxy, nitro, cyano, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; [or] R¹[,] and R² along with the adjacent atoms to which they are attached [may also] form a [5-6 membered substituted or unsubstituted cyclic structure containing carbon atoms with one or more double bonds, which may

optionally contain one or more heteroatoms selected from oxygen, nitrogen and sulfurlphenyl group; R³ when attached to nitrogen atom represents hydrogen, hydroxy, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, hetero-cyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; the linking group represented by -(CH2)n-O- may be attached either through nitrogen atom or through carbon atom where n is an integer ranging from 1 -4: Ar represents an unsubstituted or substituted divalent [single or fused aromatic or heterocyclic phenylene group; R⁴ and R⁵ together represent a bond; R⁶ represents hydrogen, or unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, hetero-aryl, or heteroaralkyl groups, with a provision that R⁶ does not represent hydrogen when R⁷ represents hydrogen or lower alkyl group; R⁷ repesents hydrogen or unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups and Y represents oxygen atom, which comprises:

a) reacting a compound of formula (IIIa)

where all symbols are as defined above with a compound of formula (IIIb)

$$(R^{9}O)_{2}$$
—P-CH-(COOR⁷) (IIIb)

where R^6 , R^7 are as defined above excluding hydrogen and R^9 represents (C₁-C₆)alkyl, to yield compound of formula (I) defined above;

b) reacting the compound of formula (IIIa)

$$\begin{array}{c|c}
 & X \\
 & N \\$$

where all symbols are as defined earlier with Wittig reagents;

c) reacting a compound of formula (IIIc)

where all symbols are as defined above with a compound of formula (IIId)

$$L^{1}(CH_{2})_{n}-O-Ar$$
 $R^{6}O$
 OR^{7}
(IIId)

where R^4 , R^5 together represent a bond, and all other symbols are as defined above and L^1 is a leaving group to produce a compound of formula (I) defined above, where the linker group $-(CH_2)_n$ -O- is attached to nitrogen atom;

d) reacting a compound of formula (IIIe)

where all symbols are as defined above with a compound of formula (IIIf)

$$\begin{array}{c}
O \\
CH_2)_{\overline{n}}O-Ar \\
R^6O
\end{array}$$
(IIII)

where R^4 , R^5 together represent a bond, L^2 is a leaving group and other symbols are as defined above, to produce a compound of formula (I) defined above, where the linker group $-(CH_2)_n$ -O- is attached to carbon atom;

e) reacting a compound of formula (IIIa)

$$\begin{array}{c|c}
R^1 & \stackrel{X}{\searrow_{I}} \\
R^2 & \stackrel{N}{N}_{R^3} \\
\end{array} (CH_2)_n O - Ar - CHO \qquad (IIIa)$$

where all other symbols are as defined above with a compound of formula (IIIg)

$$R^{5}$$
 O OR^{7} OR^{7}

where R⁵ is hydrogen and all other symbols are as defined above to yield a compound of formula (I) as defined above after dehydration;

f) reacting a compound of formula (IIIh)

$$\begin{array}{c|c}
R^1 & X \\
N & (CH_2)_n - L^1
\end{array}$$
(IIIh)

where all symbols are as defined earlier and L¹ represents a leaving group, with compound of formula (IIIi)

$$HO-Ar \xrightarrow{R^5} O OR^7$$

$$R^6O$$
(IIIi)

where R⁴ and R⁵ together represent a bond and all other symbols are as defined above to produce a compound of the formula (I) defined above;

g) reacting a compound of formula (IIIj)

$$R^1$$
 N
 N
 R^3
 N
 R^3
(IIIj)

where all symbols are as defined above with a compound of general formula (IIIi).

$$\begin{array}{c}
R^4 \\
R^5 O \\
R^6 O
\end{array}$$
(IIIi)

where R⁴ and R⁵ together represent a bond and all other symbols are as defined above to produce a compound of formula (I) defined above;

h) reacting a compound of formula (IIIk)

$$\begin{array}{c|c}
R^{1} & \stackrel{X}{\longrightarrow} N \\
R^{2} & \stackrel{V}{\longrightarrow} (CH_{2})_{n} O - Ar \cdot CH_{2} PPh_{3}Br^{-}
\end{array} (IIIk)$$

where all symbols are as defined above with a compound of formula (IIII)

$$O = OR^7$$

$$OR^6$$
(IIII)

where $R^6 = R^7$ and are as defined above excluding hydrogen to produce a compound of the formula (I);

i) cyclising a compound of formula (IIIm)

$$\begin{array}{c|c}
R^1 & X \\
N - (CH_2)_n O - A_1 - R^5 \\
R^2 & NH - R^3 - R^6 O \\
(IIIm) & O \\
\end{array}$$

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where R⁴ and R⁵ together represent a bond, R⁷ is as defined above excluding hydrogen and all other symbols are as defined above to produce a compound of formula (I) defined above where the linking group –(CH₂)n-O- is attached to nitrogen atom and if desired;

- j) converting the compounds of formula (I) obtained in any of the processes described above into pharmaceutically acceptable salts or pharmaceutically acceptable solvates.
 - 7. (Amended) A process for the preparation of compound of formula (I)

where X represents O or S; [the groups R¹, R² and the group] R³ when present on carbon atom, [may be same or different and represent] represents hydrogen, halogen, hydroxy, nitro, cyano, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; [or] R¹[,] and R² along with the adjacent atoms to which they are attached [may also] form a [5-6 membered substituted or unsubstituted cyclic structure containing carbon atoms with one or more double bonds, which may optionally contain one or more heteroatoms selected from oxygen, nitrogen and sulfur] phenyl group; R³ when attached to nitrogen atom represents hydrogen, hydroxy, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy,

hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; the linking group represented by -(CH2)n-O- may be attached either through nitrogen atom or through carbon atom where n is an integer ranging from 1 -4; Ar represents an unsubstituted or substituted divalent [single or fused aromatic or heterocyclic] phenylene group; R⁴ represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, unsubstituted or substituted aralkyl group; R⁵ represents hydrogen, hydroxy, alkoxy, halogen, lower alkyl group, acyl, unsubstituted or substituted aralkyl group; R⁶ represents hydrogen, or unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups, with a provision that R⁶ does not represent hydrogen when R⁷ represents hydrogen or lower alkyl group; R⁷ represents hydrogen or unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups and Y represents oxygen atom, which comprises:

a) reducing a compound of formula (IVa)

$$\begin{array}{c|c}
R^1 & X \\
N & N \\
R^2 & N \\
R^3 & R^6O
\end{array}$$
(IVa)

where all symbols are as defined earlier, the compound of formula (IVa) represents a compound of formula (I) where R⁴ and R⁵ together represent a bond and Y represent oxygen atom and all other symbols are as defined above, to yield a compound of the formula (I) where R⁴ and R⁵ each represent hydrogen atom and all symbols are as defined above;

b) reacting a compound of formula (IVb)

$$\begin{array}{c|c}
R^{1} & X \\
N & N \\
\stackrel{\dot{-}}{\sim} (CH_{2})_{n} \cdot O - Ar
\end{array}$$

$$\begin{array}{c|c}
R^{4} & O \\
\hline
 & OR^{7}
\end{array}$$
(IVb)

where all symbols are as defined above, R⁷ is as defined above excluding hydrogen and L³ is a leaving group with an alcohol of formula (IVc),

$$R^6$$
-OH (IVc)

where R⁶ represents unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups to produce a compound of the formula (I) defined above;

c) reacting a compound of formula (IIIh)

$$\begin{array}{c|c}
R^1 & \stackrel{X}{\longrightarrow} N \\
R^2 & \stackrel{\stackrel{1}{\longrightarrow}}{N} (CH_2)_n & \qquad (IIIh)
\end{array}$$

where L¹ is a leaving group and all other symbols are as defined above with a compound of formula (IIIi)

$$HO-Ar \xrightarrow{R^5} O OR^7$$

$$R^6O OR^7$$
(IIII)

where all symbols are as defined earlier to produce a compound of the formula (I) defined above;

d) reacting a compound of formula (IIIj)

where all symbols are as defined above with a compound of formula (IIIi)

$$HO-Ar \xrightarrow{R^4} O OR^7$$

$$R^6O$$
(IIIi)

where all symbols are as defined earlier to produce a compound of the formula (I) defined above;

e) reacting a compound of formula (IVd)

$$\begin{array}{c|c}
R^{1} & X \\
N & CH_{2})_{n} \cdot O - Ar & R^{5} & O \\
R^{2} & N & R^{3} & O \\
\end{array}$$
(IVd)

which represents a compound of formula (I) where R⁶ represents hydrogen atom and all other symbols are as defined above with a compound of formula (IVe)

$$R^6-L^3$$
 (IVe)

where R⁶ represents unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups and L³ is a leaving group to produce a compound of formula (I) defined above;

f) reacting a compound of the formula (IIIa)

$$\begin{array}{cccc}
R^{1} & & & \\
& & & \\
R^{2} & & & \\
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where all symbols are as defined above with a compound of formula (IIIg)

$$R^{5}$$
 O OR^{7} (IIIg)

where R⁵ is hydrogen and all other symbols are as defined above to yield a compound of formula (I) as defined above after dehydroxylation;

g) reacting a compound of formula (IIIc)

$$\begin{array}{c|c}
X \\
NH \\
R^2 & N & R^3
\end{array}$$
(IIIc)

where all symbols are as defined above with a compound of formula (IIId)

$$L^{1}-(CH_{2})_{n}\cdot O-Ar \xrightarrow{R^{5}} O OR^{7}$$
(IIId)

where L^1 is a leaving group and all other symbols are as defined above to produce a compound of formula (I) defined above, where the linker group $-(CH_2)_n$ -O- is attached to nitrogen atom;

h) reacting a compound of formula (IIIe)

where all symbols are as defined above with a compound of formula (IIIf)

$$\begin{array}{c}
O \\
CH_2)_{n}O-Ar
\end{array}$$

$$\begin{array}{c}
R^4 \\
O \\
OR^7
\end{array}$$
(IIII)

where all symbols are as defined above, and L^2 is a leaving group to produce a compound of formula (I) defined above, where the linker group $-(CH_2)_n$ -O- is attached to carbon atom;

i) converting a compound of formula (IVf)

$$\begin{array}{c|c}
R^{1} & X \\
N & (CH_{2})_{n} O - Ar & R^{4} & O \\
R^{2} & N & R^{3} & CN
\end{array}$$
(IVf)

where all symbols are as defined above to a compound of formula (I) defined above;

j) reacting a compound of formula (IVg)

$$\begin{array}{c|c}
R^1 & X \\
N & (CH_2)_n \cdot O - Ar
\end{array}$$

$$\begin{array}{c}
R^4 & O \\
OR^7
\end{array}$$

$$\begin{array}{c}
OR^7
\end{array}$$
(IVg)

where R^7 is as defined above excluding hydrogen and all other symbols are as defined above with a compound of formula (IVc)

$$R^6$$
 – OH (IVc)

where R⁶ represents unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups to produce a compound of formula (I);

k) cyclising a compound of formula (IIIm)

$$\begin{array}{c|c}
 & X \\
 & X \\$$

where R⁷ is as defined above excluding hydrogen and all other symbols are as defined above to produce a compound of formula (I) defined above where the linking group – (CH₂)n-O- is attached to nitrogen atom and if desired;

 converting the compounds of formula (I) obtained in any of the processes described above into pharmaceutically acceptable salts or pharmaceutically acceptable solvates. Ca

8. (Twice Amended) A process for the preparation of compound of formula (I)

where X represents O or S; [the groups R^1 , R^2 and group] R^3 when present on carbon atom[, may be same or different and represent] represents hydrogen, halogen, hydroxy, nitro, cyano, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; [or] R¹[,] and R² along with the adjacent atoms to which they are attached [may also] form a [5-6 membered substituted or unsubstituted cyclic structure containing carbon atoms with one or more double bonds, which may optionally contain one or more heteroatoms selected from oxygen, nitrogen and sulfur] a phenyl group; R³ when attached to nitrogen atom represents hydrogen, hydroxy, formyl or unsubstituted or substituted groups selected from alkyl, [cyclealkyl] cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkyl-amino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl,

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aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; the linking group represented by -(CH₂)_n-O- may be attached either through nitrogen atom or through carbon atom where n is an integer ranging from 1-4; Ar represents an unsubstituted or substituted divalent [single or fused aromatic or heterocyclic] phenylene group; R⁴ represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, unsubstituted or substituted aralkyl group or forms a bond together with the adjacent group R⁵; R⁵ represents hydrogen, hydroxy, alkoxy, halogen, lower alkyl group, acyl, unsubstituted or substituted aralkyl or R5 forms a bond together with R⁴; R⁶ represents unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylamino-carbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups, R⁷ represents hydrogen and Y represents oxygen atom, which comprises: hydrolising a compound of formula (I) as defined in claim 6, where R⁷ represents unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups and all other symbols are as defined earlier.

9. (Amended) A process for the preparation of compound of formula (I)

$$R^{1}$$
 N
 N
 R^{3}
 R^{6}
 N
 R^{7}
 R^{7}
 R^{7}
 R^{7}
 R^{7}
 R^{7}

where X represents O or S; [the groups R¹, R² and group] R³ when present on carbon atom, [may be same or different and represent] represents hydrogen, halogen, hydroxy, nitro, cyano, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl,

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heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives: [or] R¹[,] and R² along with the adjacent atoms to which they are attached [may also] form a [5-6 membered substituted or unsubstituted cyclic structure containing carbon atoms with one or more double bonds, which may optionally contain one or more heteroatoms selected from oxygen, nitrogen and sulfur] phenyl group; R³ when attached to nitrogen atom represents hydrogen, hydroxy, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; the linking group represented by -(CH₂)_n-O- may be attached either through nitrogen atom or through carbon atom where n is an integer ranging from 1 -4; Ar represents an unsubstituted or substituted divalent [single or fused aromatic or heterocyclic phenylene group; R⁴ represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, unsubstituted or substituted aralkyl group or forms a bond together with the adjacent group R⁵; R⁵ represents hydrogen, hydroxy, alkoxy, halogen, lower alkyl group, acyl, unsubstituted or substituted aralkyl or R5 forms a bond together with R⁴; R⁶ represents hydrogen or unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, heteroaralkyl groups, with a provision that R⁶ does not represent hydrogen when R⁷ represents hydrogen or lower alkyl group; R⁷ represents hydrogen or unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups and Y represents NR8, where R8 represents hydrogen, or unsubstituted or substituted alkyl, aryl, hydroxyalkyl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups; or R⁷ and R⁸ together may form a 5

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or 6 membered cyclic structure containing carbon atoms, which may optionally contain one or more heteroatoms selected from oxygen, sulfur or nitrogen, which comprises:

a) reacting a compound of formula (I)

where all symbols are as defined above and Y represents oxygen and R⁷ represents hydrogen or a lower alkyl group or YR⁷ represents a halogen atom, or COYR⁷ represents a mixed anhydride group with appropriate amines of the formula NHR⁷R⁸, where R⁷ and R⁸ are as defined earlier and if desired;

b) converting the compounds of formula (I) obtained above into pharmaceutically acceptable salts or pharmaceutically acceptable solvates.

10. (Amended) A compound of formula (I)

where X represents O or S; [the groups R¹, R² and group] R³ when present on carbon atom, [may be same or different and represent] represents hydrogen, halogen, hydroxy, nitro, cyano, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; [or] R¹[,] and R² along with the adjacent atoms to which they are attached [may] form a [5-6 membered substituted or unsubstituted cyclic structure containing carbon atoms with one or more double bonds, which may

optionally contain one or more heteroatoms selected from oxygen, nitrogen and sulfur] phenyl group; R³ when attached to nitrogen atom represents hydrogen, hydroxy, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; the linking group represented by -(CH₂)_n-O- may be attached either through nitrogen atom or through carbon atom where n is an integer ranging from 1 -4: Ar represents an unsubstituted or substituted divalent [single or fused aromatic or heterocyclic] phenylene group; R⁴ and R⁵ together represent a bond; R⁶ represents hydrogen, or unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylamino-carbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups, with a provision that R⁶ does not represent hydrogen when R⁷ represents hydrogen or lower alkyl group: R⁷ represents hydrogen or unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl groups and Y represents oxygen atom, prepared according to the process of claim 6.

11. (Amended) A compound of formula (I)

where X represents O or S; [the groups R¹, R² and group] R³ when present on carbon atom, [may be same or different and represent] <u>represents</u> hydrogen, halogen, hydroxy, nitro, cyano, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl,

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amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl. aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; [or] R¹[,] and R² along with the adjacent atoms to which they are attached [may also] form a [5-6 membered substituted or unsubstituted cyclic structure containing carbon atoms with one or more double bonds, which may optionally contain one or more heteroatoms selected from oxygen, nitrogen and sulfur] phenyl group; R³ when attached to nitrogen atom represents hydrogen, hydroxy, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; the linking group represented by -(CH2)n-O- may be attached either through nitrogen atom or through carbon atom where n is an integer ranging from 1 -4: Ar represents an unsubstituted or substituted divalent [single or fused aromatic or heterocyclic] phenylene group; R⁴ represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, or unsubstituted or substituted aralkyl group: R⁵ represents hydrogen, hydroxy, alkoxy, halogen, lower alkyl group, acyl, or unsubstituted or substituted aralkyl; R⁶ represents hydrogen, or unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups, with a provision that R⁶ does not represent hydrogen when R⁷ represents hydrogen or lower alkyl group; R⁷ represents hydrogen or unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl groups and Y represents oxygen atom, prepared according to the process of claim 7.

12. (Amended) A compound of formula (I)

where X represents O or S; [the groups R^1 , R^2 and group] R^3 when present on carbon atom. [may be same or different and represent] represents hydrogen, halogen, hydroxy, nitro, cyano, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; [or] R¹[,] and R² along with the adjacent atoms to which they are attached [may also] form a [5-6 membered substituted or unsubstituted cyclic structure containing carbon atoms with one or more double bonds, which may optionally contain one or more heteroatoms selected from oxygen, nitrogen and sulfur] phenyl group: R³ when attached to nitrogen atom represents hydrogen, hydroxy, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; the linking group represented by -(CH₂)_n-O- may be attached either through nitrogen atom or through carbon atom where n is an integer ranging from 1 -4; Ar represents an unsubstituted or substituted divalent [single or fused aromatic or heterocyclic] phenylene group; R⁴ represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, unsubstituted or substituted aralkyl group or forms a bond together with the adjacent group R⁵; R⁵ represents hydrogen, hydroxy, alkoxy, halogen, lower alkyl group, acyl, unsubstituted or substituted aralkyl or R5 forms a

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bond together with R⁴; R⁶ represents unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups, R⁷ represents hydrogen, and Y represents oxygen prepared according to the process of claim 8.

13. (Amended) A compound of formula (I)

where X represents O or S; [the groups R¹, R² and group] R³ when present on carbon atom, [may be same or different and represent] represents hydrogen, halogen, hydroxy, nitro, cyano, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; [or] R¹[,] and R² along with the adjacent atoms to which they are attached [may form] a [5-6 membered substituted or unsubstituted cyclic structure containing carbon atoms with one or more double bonds, which may optionally contain one or more heteroatoms selected from oxygen, nitrogen and sulfur] phenyl group; R³ when attached to nitrogen atom represents hydrogen, hydroxy, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid

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derivatives; the linking group represented by -(CH₂)_n-O- may be attached either through nitrogen atom or through carbon atom where n is an integer ranging from 1 -4: Ar represents an unsubstituted or substituted divalent [single or fused aromatic or heterocyclic] phenylene group; R⁴ represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, unsubstituted or substituted aralkyl group or forms a bond together with the adjacent group R⁵; R⁵ represents hydrogen, hydroxy, alkoxy, halogen, lower alkyl group, acyl, unsubstituted or substituted aralkyl or R5 forms a bond together with R⁴; R⁶ represents hydrogen, or unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylamino-carbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups, with a provision that R⁶ does not represent hydrogen when R⁷ represents hydrogen or lower alkyl group; R⁷ represents hydrogen or unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups and Y represents NR8, where R8 represents hydrogen, or unsubstituted or substituted alkyl, aryl, hydroxyalkyl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups; R⁷ and R⁸ together may form a 5 or 6 membered cyclic structure containing carbon atoms, which may optionally contain one or more heteroatoms selected from oxygen, sulfur or nitrogen, prepared according to the process of claim 9.

65. (Amended) A process for the preparation of compound of formula (I)

where X represents O or S; [the groups R¹, R² and group] R³ when present on carbon atom, [may be same or different and represent] represents hydrogen, halogen, hydroxy, nitro, cyano, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl,

amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; [or] R¹[,] and R² along with the adjacent atoms to which they are attached [may also] form [a 5-6 membered substituted or unsubstituted cyclic structure containing carbon atoms with one or more double bonds, which may optionally contain one or more heteroatoms selected from oxygen, nitrogen and sulfur] phenyl group: R³ when attached to nitrogen atom represents hydrogen, hydroxy, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; the linking group represented by -(CH₂)_n-O- may be attached either through nitrogen atom or through carbon atom where n is an integer ranging from 1-4; Ar represents an unsubstituted or substituted divalent [single or fused aromatic or heterocyclic] phenylene group; R⁴ represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, unsubstituted or substituted aralkyl group or forms a bond together with the adjacent group R⁵; R⁵ represents hydrogen, hydroxy, alkoxy, halogen, lower alkyl group, acyl, unsubstituted or substituted aralkyl or R5 forms a bond together with R⁴; R⁶ represents unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl,

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alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups, R⁷ represents hydrogen and Y represents oxygen atom, which comprises: hydrolising a compound of formula (I) as defined in claim 7, where R⁷ represents unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups and all other symbols are as defined earlier.